



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : **Confirmation No. 4248**  
Mitsuaki OSHIMA : Docket No. 2003\_1847  
Serial No. 10/735,925 : Group Art Unit 2681  
Filed December 16, 2003 :  
COMMUNICATION SYSTEM :

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEES FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicant requests consideration of the references listed on attached form PTO-1449 and any additional information identified below in paragraph 3. A legible copy of each reference listed on the Form PTO-1449 is enclosed, except a copy is not provided for:

- ☐ each U.S. Patent and U.S. Patent application publication (*for U.S. National applications filed after June 30, 2003 and International applications that have entered U.S. National Stage after June 30, 2003*),
- ☐ each reference previously cited in the international application PCT/\_\_\_\_\_; and/or
- ☐ each reference previously cited in prior parent application Serial No. \_\_\_\_\_.

1a. [X] This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, **or**

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

**and thus no certification and/or fee is required.**

1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

(1) ☐ the certification of paragraph 2 below is provided, **or**

(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

**the certification of paragraph 2 below is provided, and**

**the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.**

2. It is hereby certified

a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or

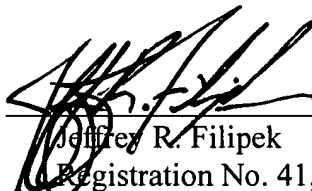
b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.
4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:
- a. ☒ a full or partial English language translation submitted herewith,
  - b. ☒ foreign patent office actions submitted herewith,
  - c. ☐ the concise explanation contained in the specification of the present application at page,
  - d. ☒ the concise explanation set forth in the attached English language abstract,
  - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☒ foreign patent office actions citing one or more of the references is enclosed.

Respectfully submitted,

Mitsuaki OSHIMA

By



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July 22, 2004

FORM PTO 1449 (modified)

ATTY DOCKET NO.  
2003\_1847SERIAL NO.  
10/735,925U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
(Use several sheets if necessary)

Date Submitted to PTO: July 22, 2004

APPLICANT  
Mitsuaki OSHIMAFILING DATE  
December 16, 2003GROUP  
2681

## U.S. PATENT DOCUMENTS

| *EXAMINER<br>INITIAL |    | DOCUMENT<br>NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF<br>APPROPRIATE |
|----------------------|----|--------------------|------|------|-------|----------|-------------------------------|
|                      | AA |                    |      |      |       |          |                               |
|                      | AB |                    |      |      |       |          |                               |
|                      | AC |                    |      |      |       |          |                               |
|                      | AD |                    |      |      |       |          |                               |
|                      | AE |                    |      |      |       |          |                               |
|                      | AF |                    |      |      |       |          |                               |
|                      | AG |                    |      |      |       |          |                               |
|                      | AH |                    |      |      |       |          |                               |
|                      | AI |                    |      |      |       |          |                               |

## FOREIGN PATENT DOCUMENTS

|  |    | DOCUMENT<br>NUMBER | DATE    | COUNTRY | CLASS | SUBCLASS | TRANSLATION<br>YES NO |
|--|----|--------------------|---------|---------|-------|----------|-----------------------|
|  | AJ | 2-154583           | 6-13-90 | Japan   |       |          | abstract              |
|  | AK |                    |         |         |       |          |                       |
|  | AL |                    |         |         |       |          |                       |
|  | AM |                    |         |         |       |          |                       |
|  | AN |                    |         |         |       |          |                       |

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

|    |  |
|----|--|
| AO | Shigeki MORIYAMA et al., "Delay Propagation Characteristics at VHF and UHF bands in Urban Area", 1991 Spring National Convention Record, The Institute of Electronics, Information and Communication Engineers, Part 2, p. 406, March 15, 1991 |
| AP | Yasuhiro ITO et al., "Adaptive Weighted Code Division Multiplexing (AW-CDM) Transmission System for Terrestrial Digital Television Broadcasting", ITE Technical Report Vol. 17, No. 13, pp 27-32, February 25, 1993                            |
| AQ |  |

EXAMINER

DATE CONSIDERED